



Maryland
Department of
the Environment

Overview of the Regional Greenhouse Gas Initiative (RGGI) and Greenhouse Gas Reduction Efforts

Presentation to the Maryland General Assembly by:
Serena McIlvain, Secretary-Designee
Chris Hoagland, Air Director
February 2, 2023

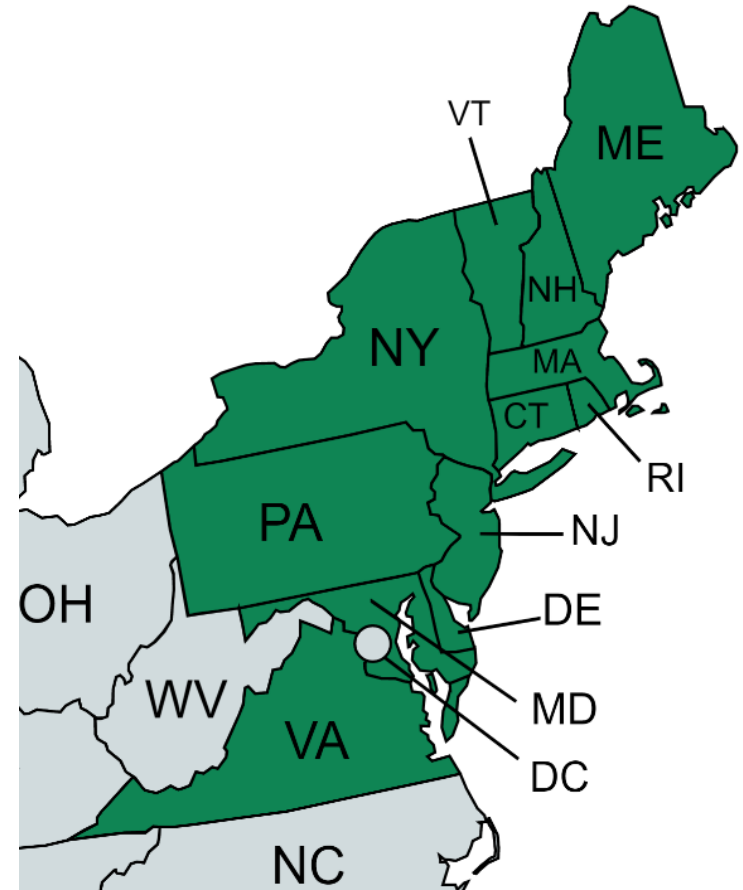


PART I: THE REGIONAL GREENHOUSE GAS INITIATIVE (RGGI)



The Regional Greenhouse Gas Initiative

- Carbon Cap on Power Plants
- 12 States Participate
- Most allowances sold at auction
- Auction proceeds fund energy programs and community projects





What is “Cap and Invest”?

1. Require CO2 sources to turn in **allowances** for their emissions.

2. Only issue a limited number of allowances.

3. Let sources trade allowances.

“Cap and Trade”

4. Auction the allowances and invest proceeds into energy programs & community projects.

“Cap and Invest”



MD State Agency Roles

RGGI Regional Coordination

RGGI Inc. Board of Directors

Agency Heads

Staff Committees

State Policymaking

Program Design & Program Review

MDE



Regulations, Auctions

State Investment

MEA

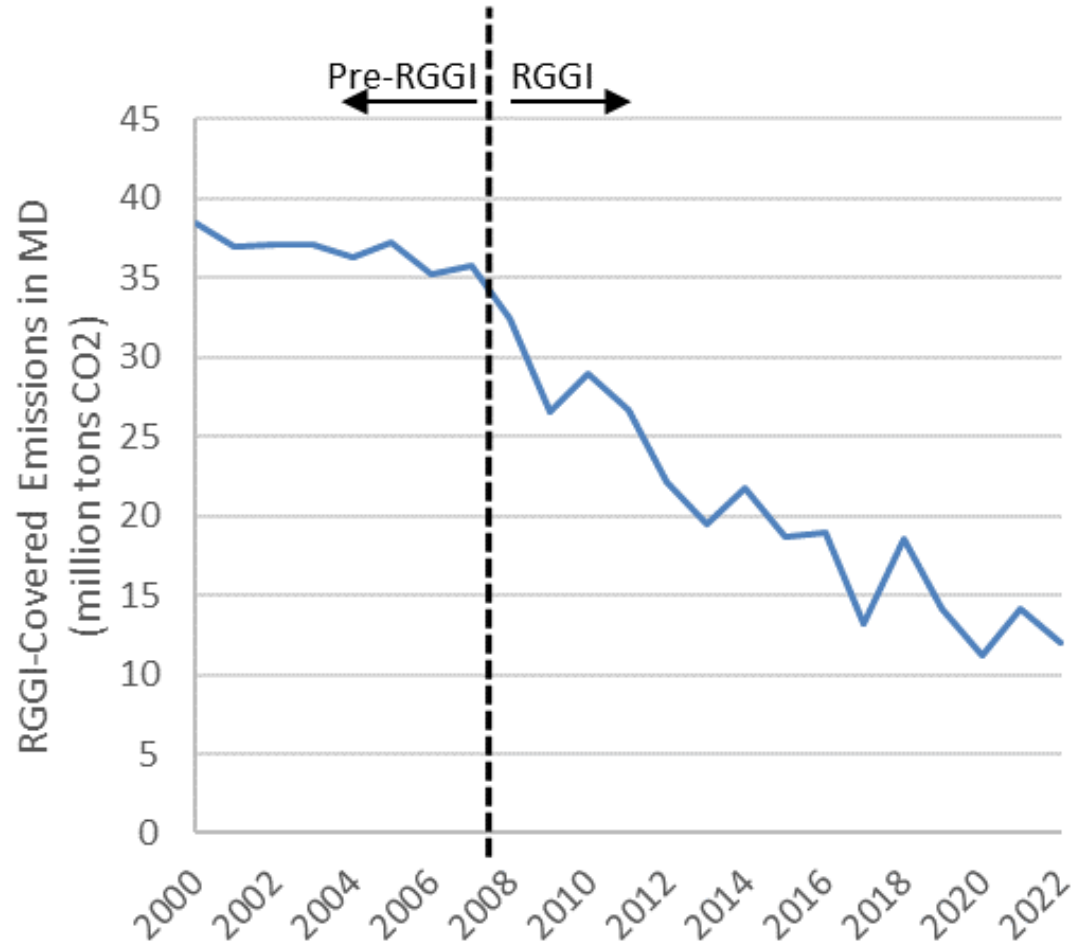


Strategic Energy Investment Fund (SEIF)



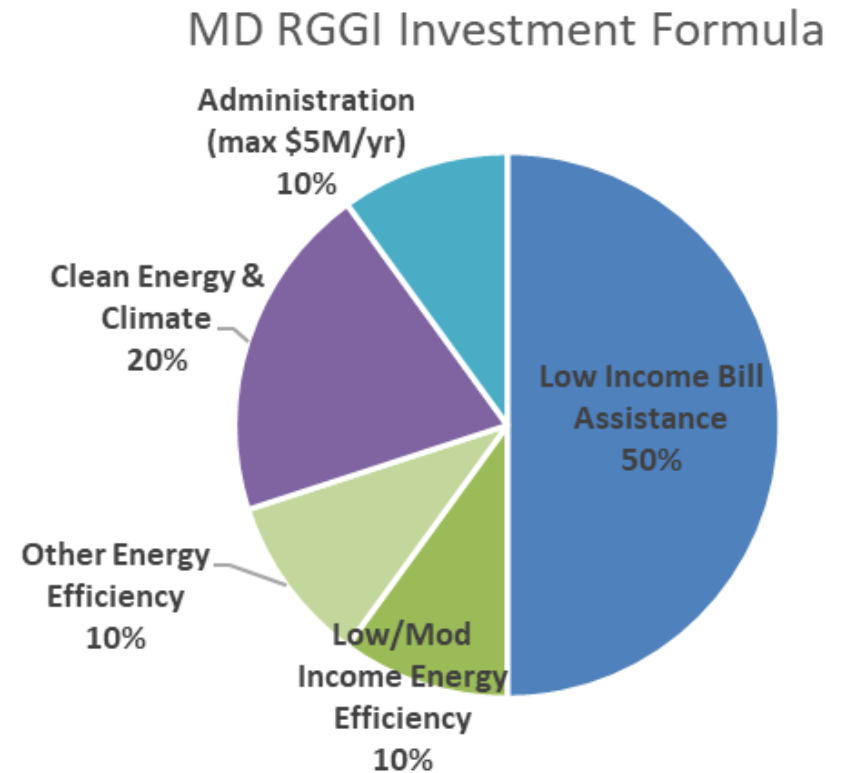
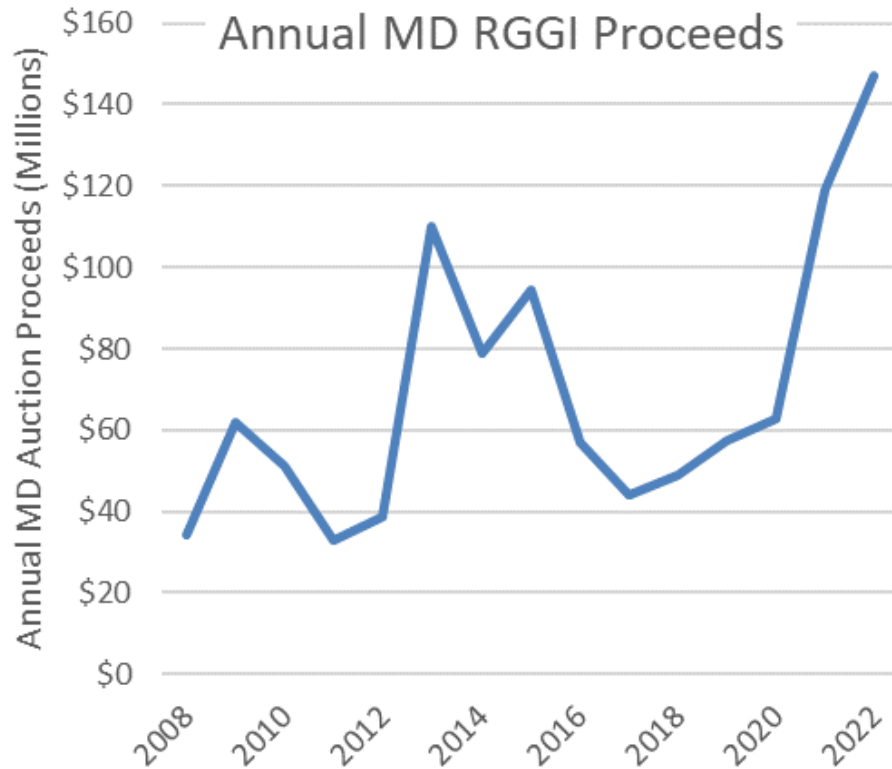
RGGI Emissions

- RGGI states have cut power plant CO₂ in half since the program began.
- Down 63% in Maryland.
- More rapid than the rest of the country.





Maryland Proceeds and Investment









- Annual auction proceeds vary with the market price for RGGI allowances.
- Cumulative proceeds for Maryland recently passed \$1 billion.
- MEA's invests RGGI proceeds according to a formula set in statute.
- The majority of proceeds are invested in low-income households and facilities serving low and moderate income communities.



Regional Benefits

The states report annually on their investments and the benefit from those investments.

Table 7: All-Time Benefits of RGGI Investments		
Category		Lifetime Benefits of All RGGI Investments
	Participating Households	7,237,334
	Participating Businesses	293,137
	Short Tons CO ₂ Avoided	49,523,308
	Megawatt-Hours Saved	74,527,807
	MMBtu Saved	255,317,388
	Energy Bill Savings	\$14,816,129,607



Regional Benefits

Independent analyses from *The RGGI Project Series*:

As documented by Analysis Group, the significant economic benefits generated by RGGI are primarily due to the auction design and smart investment decisions by the RGGI states – each according to their own priorities – in energy efficiency, clean energy, and consumer-benefit programs.

LATEST REPORT FINDINGS (2015-2017):

Added **\$1.4 billion** in net economic value

Created **14,500** new job-years

Produce **\$220 million** in energy savings

Reduced money flowing out of state to buy fossil fuel by **\$1.37 billion**

RGGI PUBLIC HEALTH IMPACTS

The RGGI Project Series sponsored the first and, to date, only, comprehensive expert analysis of RGGI's public health impacts. Based on the first six years of operation (2009-2014), this study found RGGI has significantly reduced air pollution from power plants, yielding significant health benefits in the nine RGGI states as well as neighboring Northeast states.

Saved up to **830** lives

Avoided more than **8,200** asthma attacks

Averted up to **47,000** lost work days

Provided up to **\$8.3 billion** in health savings and other benefits



Ongoing Program Review

- The states have convened for a third Program Review to evaluate and improve the program.
 - Two prior Program Reviews in 2012-2013 and 2016-2017 resulted in substantial improvements.
- Priority topics for this program review:
 - Stringency of the regional cap
 - Additional approaches to environmental justice
- Next round of public outreach scheduled for the Spring.

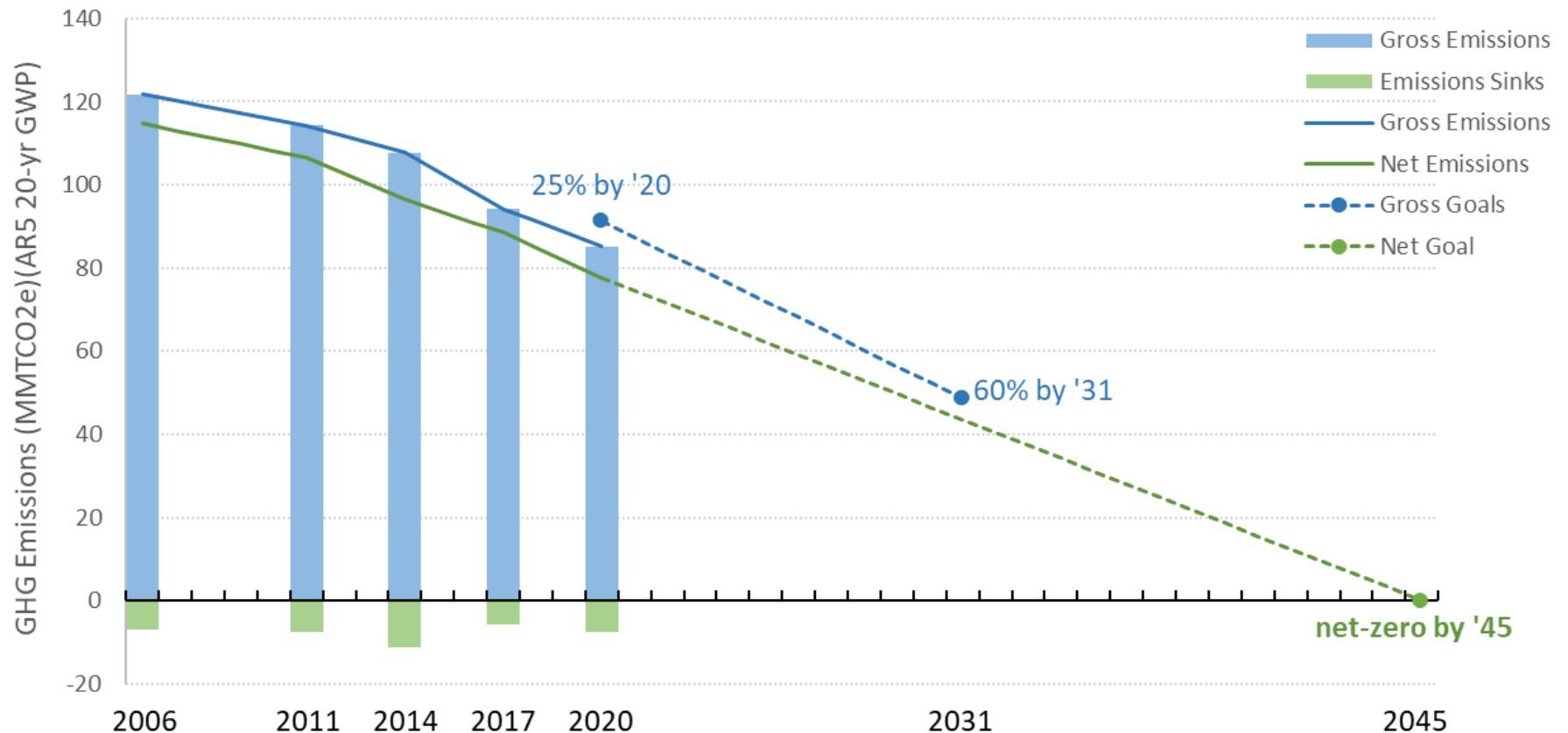


PART II: MARYLAND GREENHOUSE GAS REDUCTION EFFORTS



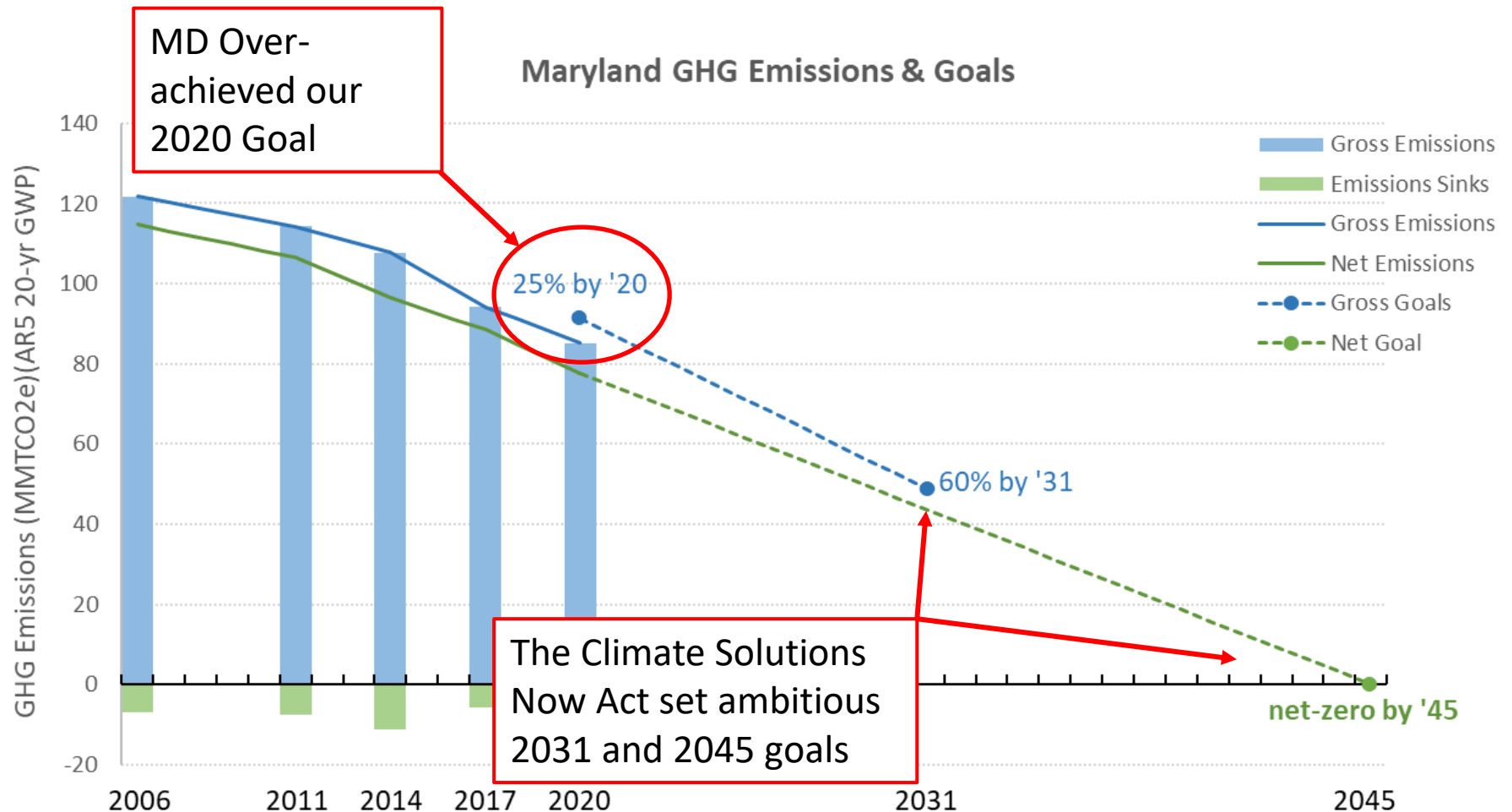
New and Old Climate Goals

Maryland GHG Emissions & Goals





New and Old Climate Goals





New Climate Plan

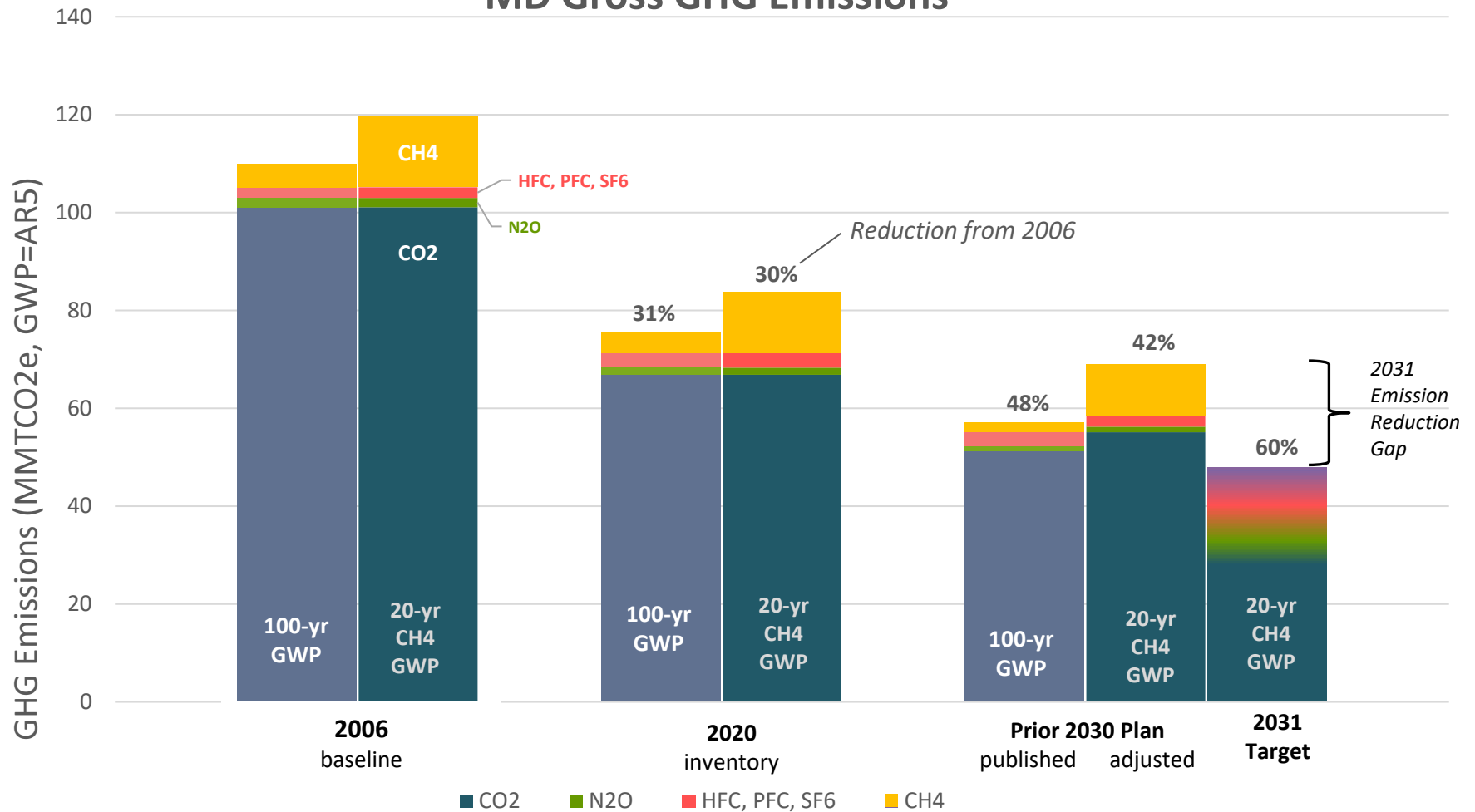
The CSNA requires MDE to propose a plan to achieve the new goals in June, and finalize by December

- MDE has engaged UMD's Center for Global Sustainability to perform the GHG analysis at the heart of the plan.
- MDE is working with agency partners and UMD to prepare analysis of GHG pathways.
- MDE will coordinate with the Maryland Commission on Climate Change (Mitigation Working Group) on plan development.
- The new goals are very ambitious (*most ambitious in the nation*) so will require substantial new policy and investment.



Prior Climate Plan and 20-yr GWP Adjusted GHG Emissions Targets

MD Gross GHG Emissions

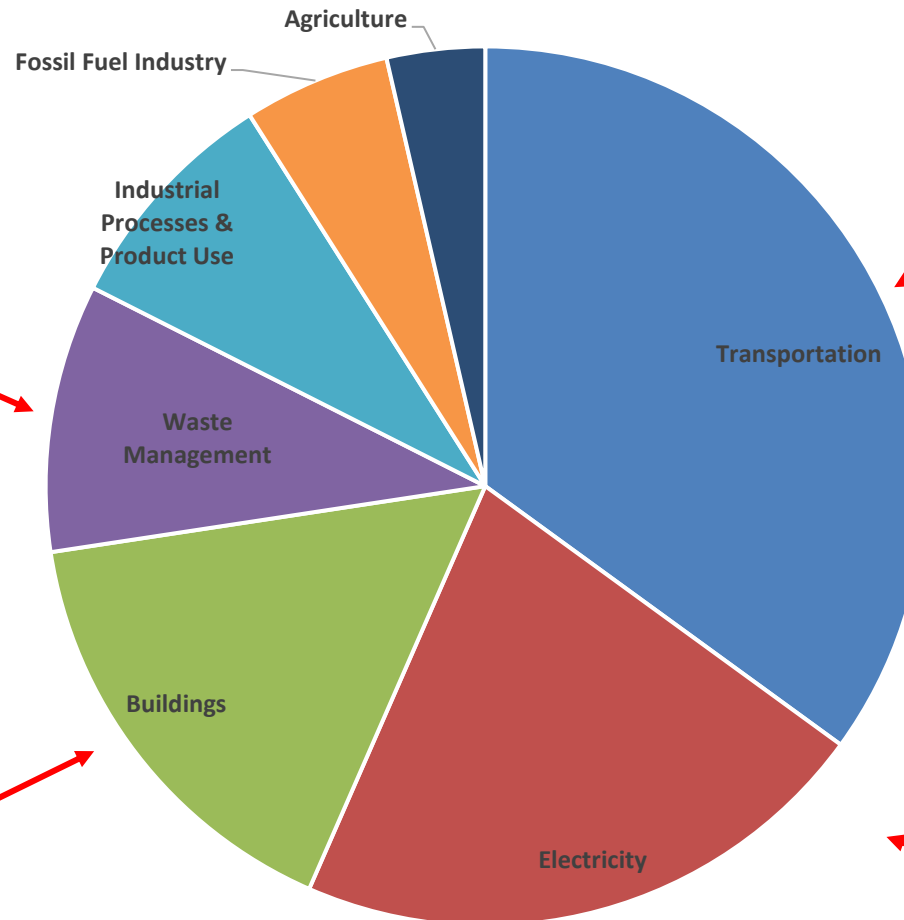


GWP = Global Warming Potential. Used to compare relative warming impact of different gases.



Actions in the Meantime

Maryland Emissions in 2020



MDE preparing Advanced Clean Cars II regulation (100% light-duty ZEV sales by 2035)

MDE proposed landfill methane and food waste diversion rules in December

MDE drafting Building Energy Performance Standards (CSNA requirement)

MD Climate Commission recommended numerous additional policies.

Total 2020 inventory: 85 million metric tons of CO₂-equivalent (using 20-year global warming potential)



Contact

Chris Hoagland
chris.hoagland@maryland.gov